(2) naphthyl,

(3) a 5- to 10-membered monocyclic or bicyclic heterocyclic ring having 1 to 4 heteroatoms selected from the group consisting of oxygen, sulfur, or nitrogen, or

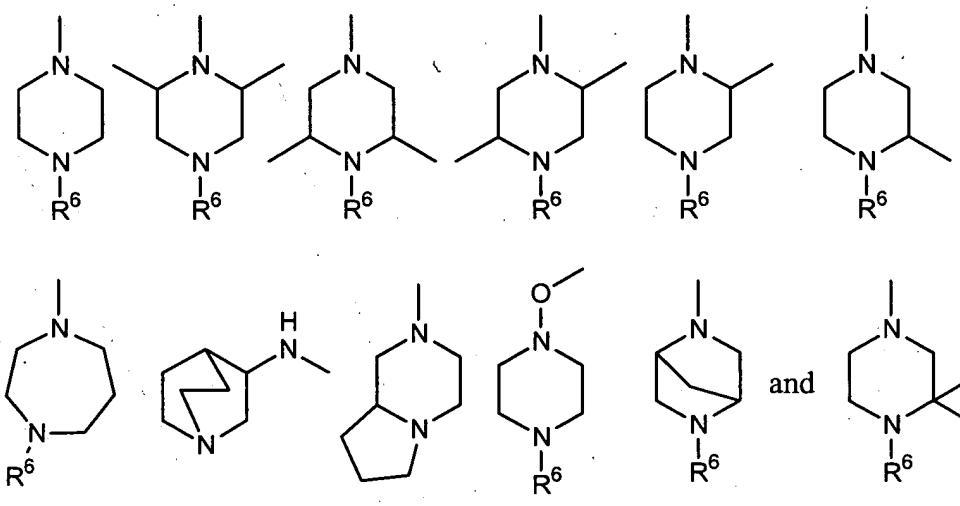
(4) -R^9-phenyl;

wherein the phenyl, naphthyl, or heterocyclic ring is optionally substituted with halogen, C_{1-6} alkyl, CF_3, hydroxyl, C_{1-6} alkoxyl, OCF_3, $COCF_3$, CN, NO_2, phenyloxy, phenyl, C_{1-6} alkylsulfonyl, C_{2-6} alkenyl, -NR^7R^8, C_{1-6} alkylcarboxyl, formyl, -C_{1-6} alkyl-NH-CO-phenyl, -C_{1-6} alkyl-CO-NH-phenyl, -NH-CO-C_{1-6} alkyl, -CO-NR^7R^8, or SR^7; wherein each of R^7 and R^8 is independently H or C_{1-6} alkyl; and R^9 is C_{1-6} alkyl or C_{2-6} alkenyl, either of which is optionally substituted with phenyl or phenyloxy;

R^2 is H, phenyl, I, or C_{1-6} alkyl;

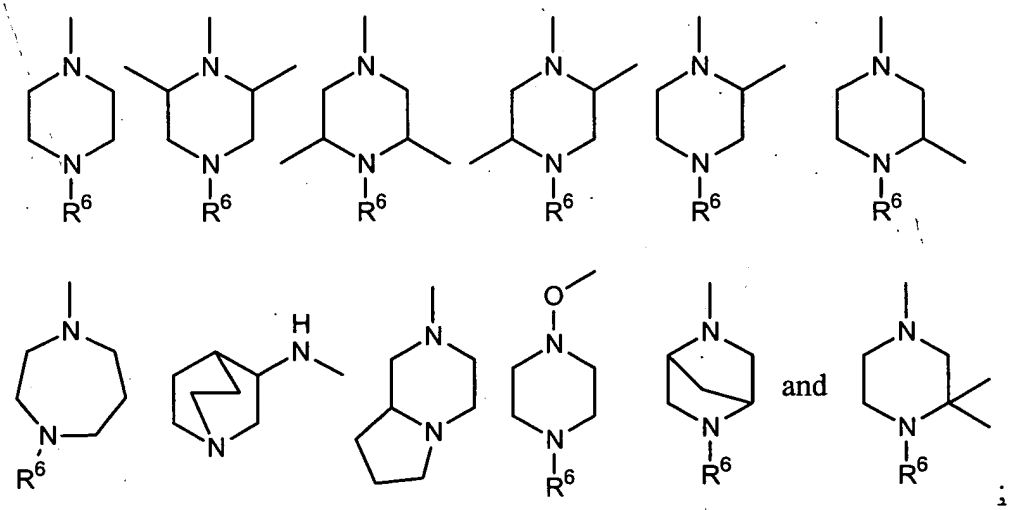
R^3 is H or 3-(1-azabicyclo[2.2.2]oct-2-en)yl;

R^4 is selected from the group consisting of:



wherein R^6 is H, C_{1-6} alkyl, or benzyl; and

R^5 is H, hydroxy, C_{1-3} alkoxy, F, NO_2, CF_3, OCF_3, or is selected from the group consisting of:



and

or a pharmaceutically acceptable salt, hydrate, or stereoisomer thereof,
with the proviso that when R^2 is alkyl, R^4 is not H.

2 (Amended). The compound according to claim 1, wherein

Ar is

(1) phenyl that is unsubstituted or optionally mono- or poly-substituted with halogen, C_{1-6} alkyl, CF_3, hydroxyl, C_{1-6} alkoxyl, OCF_3, CN, NO_2, phenyloxyl, phenyl, alkylsulfonyl, C_{1-6} alkenyl, $-NH_2$, $-NHR^7$, $-NR^7R^8$, C_{1-6} alkylcarboxyl, formyl, $-NH-CO-C_{1-6}$ alkyl, $-CO-NR^7R^8$, or SR^7 wherein each of R^7 and R^8 is independently H or C_{1-6} alkyl;

(2) 1-naphthyl or 2-naphthyl that is unsubstituted or optionally mono- or poly-substituted with halogen, C_{1-6} alkyl, CF_3, hydroxyl, C_{1-6} alkoxyl, OCF_3, CN, NO_2, phenyloxyl, phenyl, alkylsulfonyl, C_{1-6} alkenyl, $-NH_2$, $-NHR^7$, $-NR^7R^8$, C_{1-6} alkylcarboxyl, formyl, $-NH-CO-C_{1-6}$ alkyl, $-CO-NR^7R^8$, or SR^7 wherein each of R^7 and R^8 is independently H or C_{1-6} alkyl;

(3) cynnamoyl;

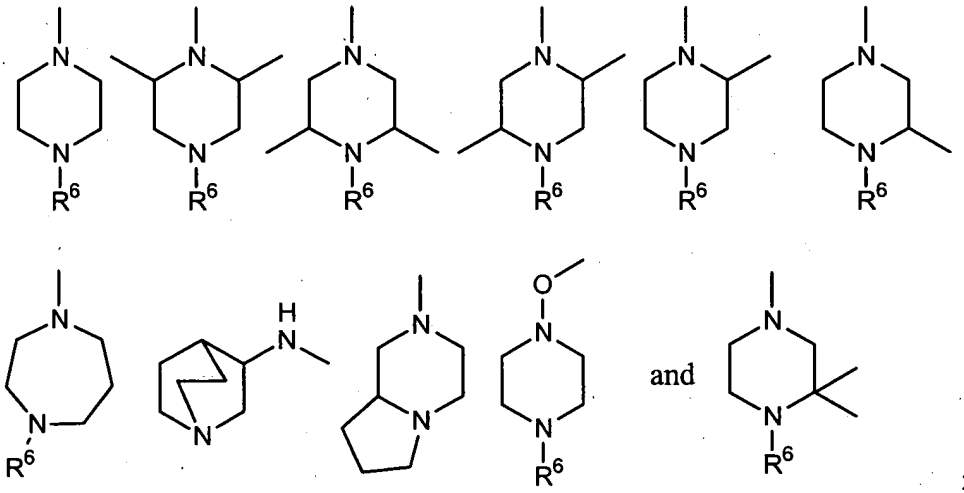
(4) benzyl;

(5) 1,1-diphenylethyl;

(6) a monocyclic or bicyclic heterocyclic ring selected from the group consisting of furyl, pyrrolyl, triazolyl, diazolyl, oxazolyl, thiazolyl, oxadiazolyl, isothiazolyl, isoxazolyl, thiadiazolyl, pyrimidyl, pyrazinyl, thienyl, imidazolyl, pyrazolyl, indolyl, quinolinyl,

isoquinolinyl, benzofuryl, benzothienyl, and benzoxadiazolyl, said heterocyclic ring being optionally mono- or di-substituted substituted with halogen or C_{1-6} alkyl;

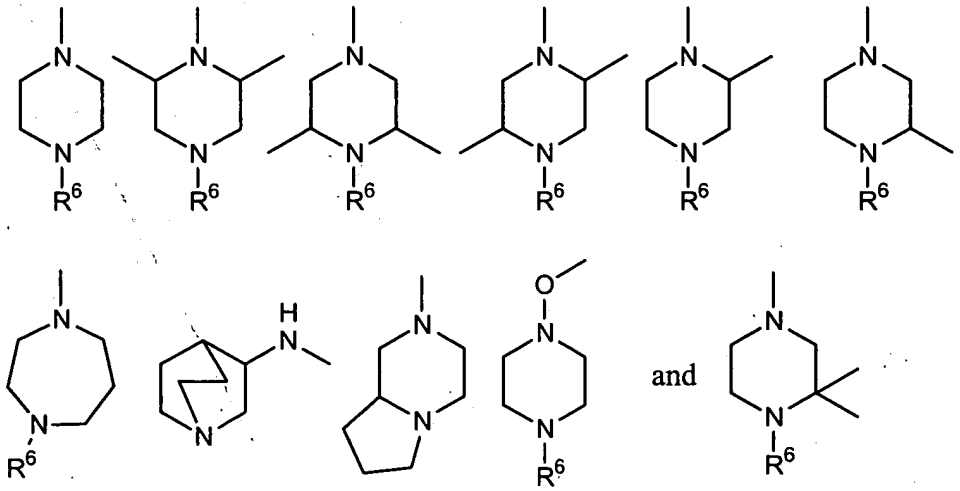
R^4 is selected from the group consisting of:



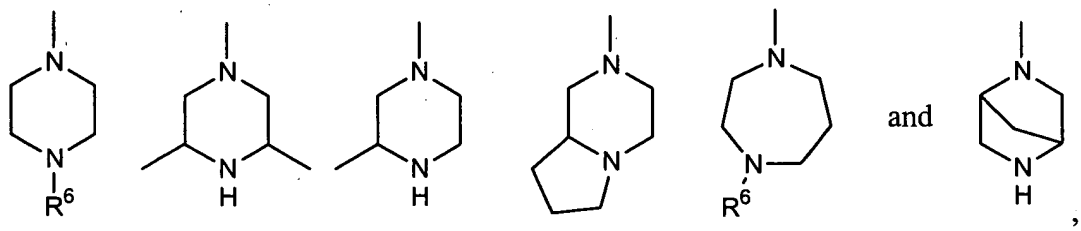
;

wherein R^6 is H, C_{1-6} alkyl, or benzyl; and

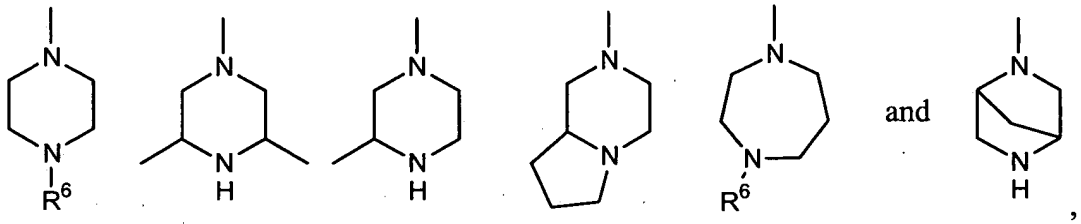
R^5 is H, hydroxy, C_{1-3} alkoxy, F, NO_2, CF_3, OCF_3 or is selected from the group consisting of:



12 (Amended). A compound according to claim 1, wherein R^4 is independently a heterocyclic ring selected from the group consisting of:



, and R^5 is independently H or a heterocyclic ring selected from the group consisting of:

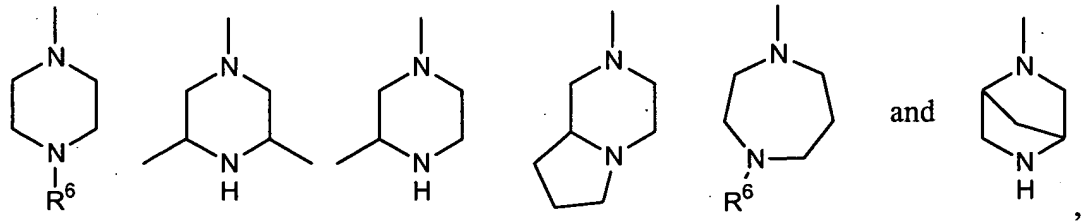


,

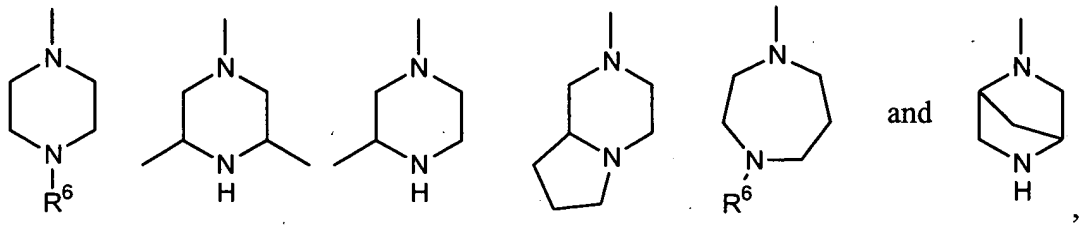
wherein R^6 is H, C_{1-3} alkyl, or benzyl.

A2

13 (Amended). A compound according to claim 1, wherein Ar is phenyl, optionally substituted with F, Cl, Br, methyl, CF_3, C_{1-4} alkoxyl, OCF_3, CN, NO_2, phenyloxy, phenyl, methylsulfonyl, or $-NR^7R^8$ where each of R^7 and R^8 is independently H or methyl; each of R^2 and R^3 is H; and R^4 is independently a heterocyclic ring selected from the group consisting of:



, and R^5 is independently H or a heterocyclic ring selected from the group consisting of:

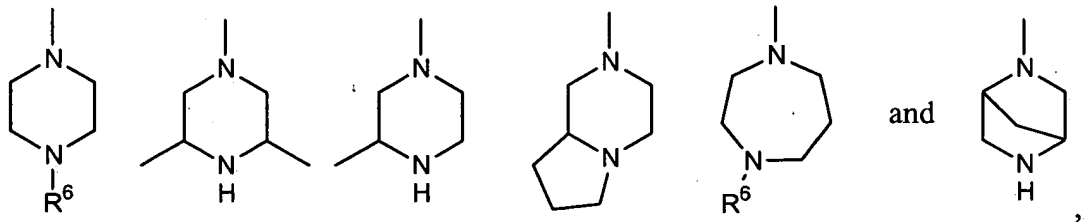


,

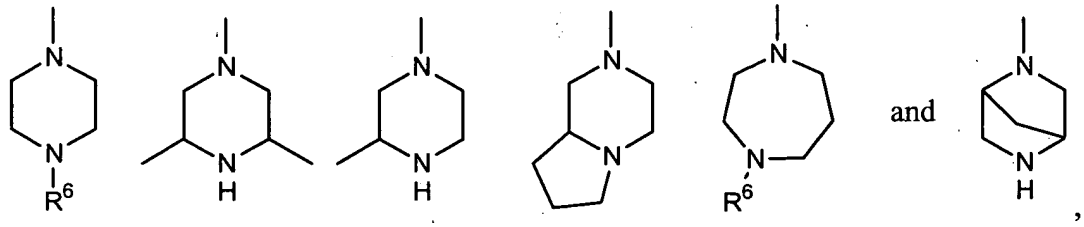
wherein R^6 is H, C_{1-3} alkyl, or benzyl.

14 (Amended). A compound according to claim 1, wherein Ar is 1-naphthyl or 2-naphthyl, each of which is optionally substituted with F, Cl, Br, methyl, CF_3, C_{1-4} alkoxyl, OCF_3,

CN, NO_2, phenyloxy, phenyl, methylsulfonyl, or $-NR^7R^8$, where each of R^7 and R^8 is independently H or methyl; each of R^2 and R^3 is H; and R^4 is independently a heterocyclic ring selected from the group consisting of:



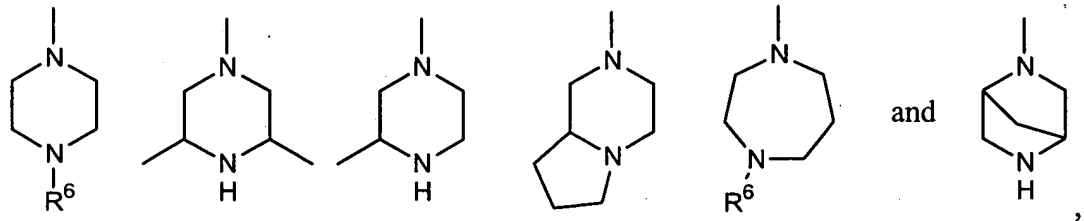
, and R^5 is independently H or a heterocyclic ring selected from the group consisting of:



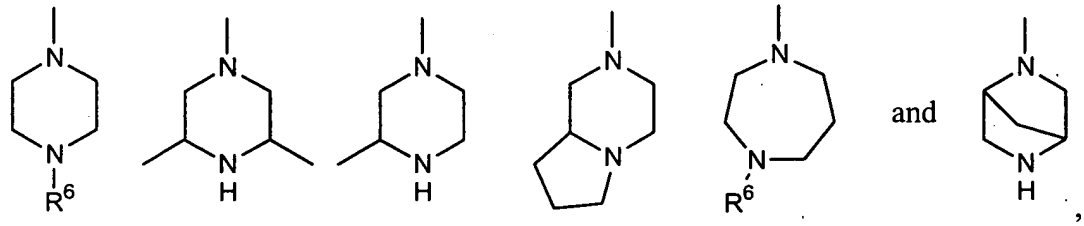
,

wherein R^6 is H, C_{1-3} alkyl, or benzyl.

15 (Amended). A compound according to claim 1, wherein Ar is a heterocyclic ring selected from the group consisting of pyridinyl, thienyl, imidazolyl, pyrazolyl, benzothienyl, and benzoxadiazolyl, each being optionally substituted with halogen or C_{1-6} alkyl; each of R^2 and R^3 is H; and R^4 is independently a heterocyclic ring selected from the group consisting of:



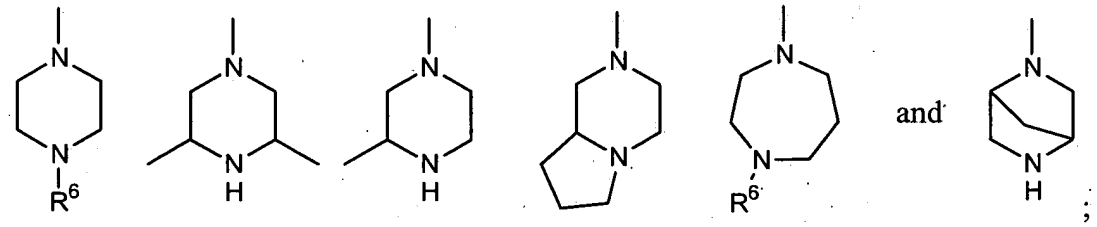
, and R^5 is independently H or a heterocyclic ring selected from the group consisting of:



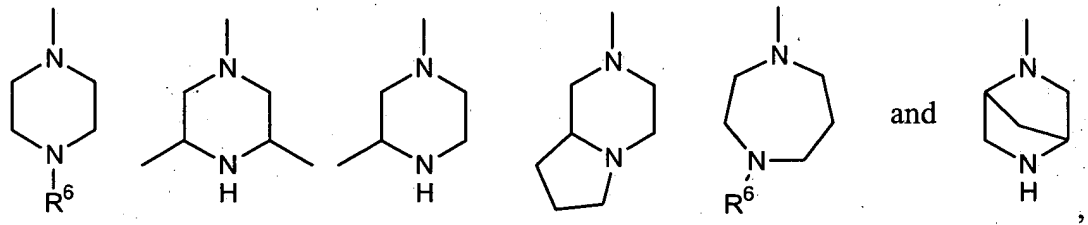
,

wherein R^6 is H, C_{1-3} alkyl, or benzyl.

16 (Amended). A compound according to claim 1, wherein Ar is 2-pyridyl, 3-pyridyl, or 4-pyridyl; each of R^2 and R^3 is H; and R^4 is independently a heterocyclic ring selected from the group consisting of:

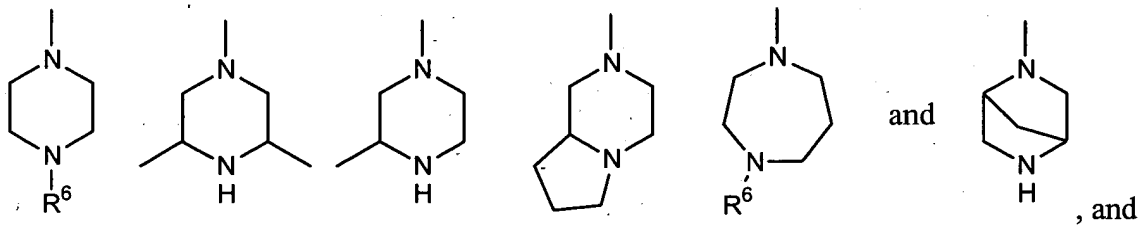


and R^5 is independently H or a heterocyclic ring selected from the group consisting of:

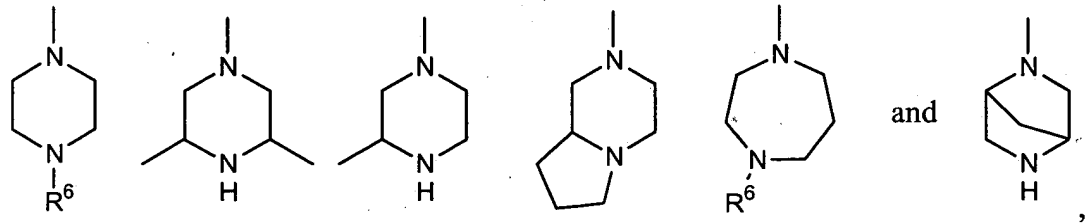


wherein R^6 is H, C_{1-3} alkyl, or benzyl.

17 (Amended). A compound according to claim 1, wherein Ar is -R^9-phenyl; each of R^2 and R^3 is H; and R^4 is independently a heterocyclic ring selected from the group consisting of:



and R^5 is independently H or a heterocyclic ring selected from the group consisting of:



wherein R^6 is H, C_{1-3} alkyl, or benzyl; R^9 is C_{1-3} alkyl or C_{2-3} alkenyl, either of which is optionally substituted with phenyl or phenyloxy; each phenyl being optionally substituted with F,

Cl, Br, methyl, CF_3, C_{1-4} alkoxyl, OCF_3, CN, NO_2, phenyloxy, phenyl, methylsulfonyl, or -NR^7R^8; and each of R^7 and R^8 being independently H or C_{1-6} alkyl.

18 (Amended). A compound selected from the group consisting of:

1-phenylsulfonyl-4-piperazinylindole hydrochloride,

1-[(2,5-dimethoxyphenyl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

1-(mesitylsulfonyl)-4-(1-piperazinyl)-1H-indole hydrochloride,

1-(1-naphthylsulfonyl)-4-(1-piperazinyl)-1H-indole hydrochloride,

N,N-dimethyl-5-{[4-(1-piperazinyl)-1H-indol-1-yl]sulfonyl}-1-naphthalenamine hydrochloride,

1-[(4-propoxyphenyl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

1-[(2,5-dichloro-3-thienyl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

1-[(4-methoxyphenyl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

1-[(2,4-difluorophenyl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

1-([1,1'-biphenyl]-4-ylsulfonyl)-4-(1-piperazinyl)-1H-indole hydrochloride,

1-[(3,4-dimethoxyphenyl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

5-methyl-2-methoxyl-{[4-(1-piperazinyl)-1H-indol-1-yl]sulfonyl}phenyl ether hydrochloride,

1-[(2,5-dichlorophenyl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

1-[(5-chloro-1,3-dimethyl-1H-pyrazol-4-yl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

1-[(3-chloro-2-methylphenyl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

2-chloro-5-(4-{[4-(1-piperazinyl)-1H-indol-1-yl]sulfonyl}phenoxy)benzonitrile hydrochloride,

4-bromo-2-{[4-(1-piperazinyl)-1H-indol-1-yl]sulfonyl}phenyl methyl ether hydrochloride,

4-(1-piperazinyl)-1-(3-pyridinylsulfonyl)-1H-indole hydrochloride,

7-{[4-(1-piperazinyl)-1H-indol-1-yl]sulfonyl}-2-(trifluoroacetyl)-1,2,3,4-tetrahydroisoquinoline hydrochloride,

methyl 2-{[4-(1-piperazinyl)-1H-indol-1-yl]sulfonyl}phenyl sulfone hydrochloride,

1-[(4-fluorophenyl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

1-[(5-chloro-3-methyl-1-benzothien-2-yl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

4-(4-methyl-1-piperazinyl)-1-(4-methylbenzenesulfonyl)-1H-indole hydrochloride hydrochloride,

4-piperazino-N-(4-trifluoromethyl)phenylsulfonyl)indole hydrochloride,

4-(3-methylpiperazine)-(N-(4-trifluoromethyl)phenylsulfonyl)indole dihydrochloride,

4-(4-methyl-1-piperazinyl)-1-(2-methylbenzenesulfonyl)-1H-indole hydrochloride,

4-(4-ethyl-1-piperazinyl)-1-(2-methylbenzenesulfonyl)-1H-indole hydrochloride,

4-(1-piperazinyl)-1-(2-methylbenzenesulfonyl)-1H-indole hydrochloride,

4-(5-aza-indolizidinyl)-1-(2-methylbenzenesulfonyl)-1H-indole hydrochloride,

4-(4-methyl-1-homopiperazinyl)-1-(2-methylbenzenesulfonyl)-1H-indole hydrochloride,

4-(3-methyl-1-piperazinyl)-1-(2-methylbenzenesulfonyl)-1H-indole hydrochloride,

4-(*cis*-3,5-dimethyl-1-piperazinyl)-1-(2-methylbenzenesulfonyl)-1H-indole hydrochloride,

4-(4-isopropyl-1-piperazinyl)-1-(2-methylbenzenesulfonyl)-1H-indole hydrochloride,

4-((1S,4S)-2-methyl-2,5-diazabicyclo[2.2.1]heptyl)-1-(2-methylbenzenesulfonyl)-1H-indole hydrochloride,

4-(4-methyl-1-homopiperazinyl)-1-(benzenesulfonyl)-1H-indole hydrochloride,

4-(*cis* 3,5-dimethyl-1-piperazinyl)-1-(benzenesulfonyl)-1H-indole hydrochloride,

4-(4-ethyl-1-piperazinyl)-1-(benzenesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(4-nitro-benzenesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(4-bromo-benzenesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(4-chloro-benzenesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(*E* 2-phenyl-ethensulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(3-trifluoromethyl-benzenesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(4-cyanobenzenesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(4-chloro-7-chloro-2,1,3-benzoxadiazole sulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(3-cyanobenzenesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(4-phenoxybenzenesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(4-chlorophenylmethanesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(4-methylphenylmethanesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(1,1-diphenylethanesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(4-trifluoromethoxybenzenesulfonyl)-1H-indole hydrochloride,

4-piperazinyl-1-(5-[(benzoylamino)methyl]thiophene-2-sulfonyl)-1H-indole hydrochloride,

1-[(N-methyl-1H-imidazol-4-yl)sulfonyl]-4-(1-piperazinyl)-1H-indole hydrochloride,

2-iodo-1-(phenylsulfonyl)-4-(1-piperazinyl)-1H-indole hydrochloride,

2-phenyl-1-(phenylsulfonyl)-4-(1-piperazinyl)-1H-indole hydrochloride,

4-piperazinyl-2-methyl-1-benzosulfonylindole trifluoroacetate, and

1-phenylsulfonyl-4-(homopiperazinyl)-indole hydrochloride.

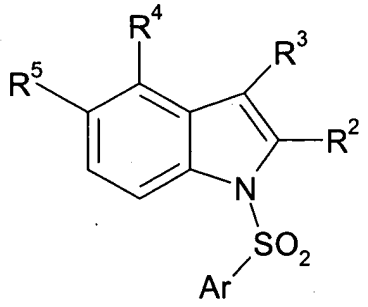
22 (Amended). A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

24 (Amended). A method of treatment of a disease mediated by the serotonin related 5-HT_6 receptor comprising administering to a patient in need thereof a therapeutically effective amount of a compound according to claim 1.

25 (Amended). A method of treatment of a disease mediated by the serotonin related 5-HT_6 receptor comprising administering to a patient in need thereof a therapeutically effective amount of a compound according to claim 18. --

Please add claims 28-47.

-- 28 (New). A compound of formula (I):



(I)

wherein

Ar is

(1) phenyl,

(2) naphthyl,

(3) a 5- to 10-membered monocyclic or bicyclic heterocyclic ring having 1 to 4 heteroatoms selected from the group consisting of oxygen, sulfur, or nitrogen, or

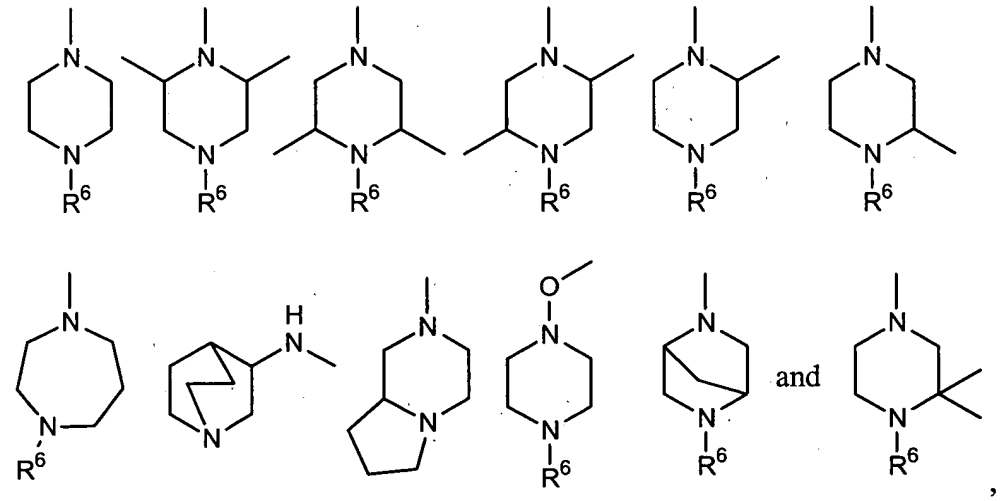
(4) $-R^9$-phenyl;

wherein the phenyl, naphthyl, or heterocyclic ring is optionally substituted with halogen, C_{1-6} alkyl, CF_3, hydroxyl, C_{1-6} alkoxyl, OCF_3, $COCF_3$, CN, NO_2, phenyloxy, phenyl, C_{1-6} alkylsulfonyl, C_{2-6} alkenyl, $-NR^7R^8$, C_{1-6} alkylcarboxyl, formyl, $-C_{1-6}$ alkyl-NH-CO-phenyl, $-C_{1-6}$ alkyl-CO-NH-phenyl, $-NH-CO-C_{1-6}$ alkyl, $-CO-NR^7R^8$, or SR^7; wherein each of R^7 and R^8 is independently H or C_{1-6} alkyl; and R^9 is C_{1-6} alkyl or C_{2-6} alkenyl, either of which is optionally substituted with phenyl or phenyloxy;

R^2 is H, phenyl, I, or C_{1-6} alkyl;

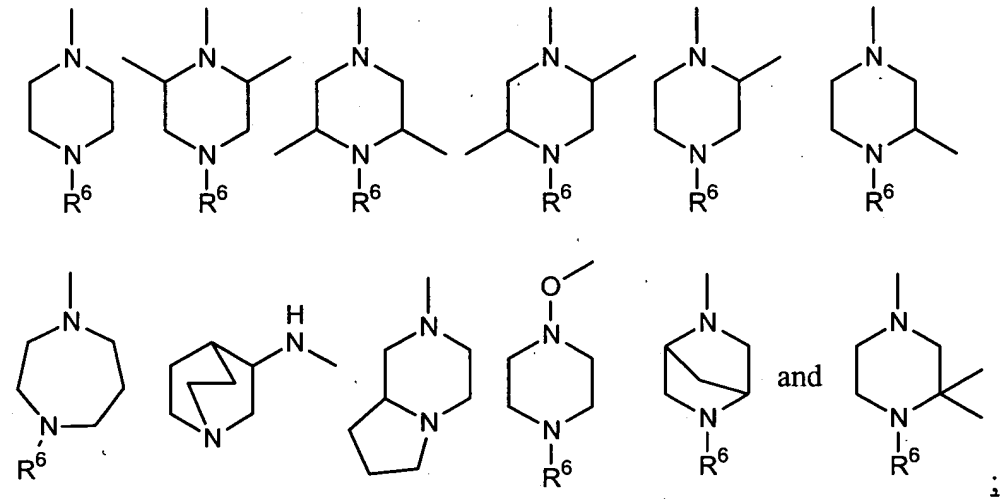
R^3 is H or 3-(1-azabicyclo[2.2.2]oct-2-en)yl;

R^4 is H or is selected from the group consisting of:



wherein R^6 is H, C_{1-6} alkyl, or benzyl; and

R^5 is hydroxy, C_{1-3} alkoxy, F, NO_2, CF_3, OCF_3, or is selected from the group consisting of:



or a pharmaceutically acceptable salt, hydrate, or stereoisomer thereof,

with the proviso that when R^2 is alkyl, R^4 is not H.

29 (New). The compound of claim 1, wherein R^5 is H.

30 (New). The compound of claim 28, wherein R^5 is H.

31 (New). The compound of claim 28, selected from the group consisting of:

N-benzenesulfonyl-5-(4-methylpiperazin-1-yl)-indole,

N-(4-methylbenzenesulfonyl)-5-(4-methylpiperazin-1-yl)-indole,

N-benzenesulfonyl-5-(4-isopropylpiperazin-1-yl)-indole,

N-(4-methylbenzenesulfonyl)-5-(4-isopropylpiperazin-1-yl)-indole,

N-(3,4-dimethoxybenzenesulfonyl)-5-(4-propylpiperazin-1-yl)-indole, hydrochloride,

N-(3-fluorobenzenesulfonyl)-5-(4-propylpiperazin-1-yl)-indole, hydrochloride,

N-(4-propylbenzenesulfonyl)-5-(4-methylpiperazin-1-yl)-indole, hydrochloride,

N-(1-naphtalenesulfonyl)-5-(4-methylpiperazin-1-yl)-indole, hydrochloride,

N-(biphenyl-4-sulfonyl)-5-(4-methylpiperazin-1-yl)-indole, hydrochloride,

N-(4-methoxybenzenesulfonyl)-5-(4-methylpiperazin-1-yl)-indole, hydrochloride,

N-(3,4-dimethoxybenzenesulfonyl)-5-(4-methylpiperazin-1-yl)-indole, hydrochloride,

N-(2,4-difluorobenzenesulfonyl)-5-(4-methylpiperazin-1-yl)-indole, hydrochloride,

N-(4-methoxybenzenesulfonyl)-5-(4-benzylpiperazin-1-yl)-indole, hydrochloride,

N-(2,4-difluorobenzenesulfonyl)-5-(4-benzylpiperazin-1-yl)-indole, hydrochloride,

N-(4-butoxybenzenesulfonyl)-5-(4-benzylpiperazin-1-yl)-indole, hydrochloride,

N-(3,4-dimethoxybenzenesulfonyl)-5-(4-benzylpiperazin-1-yl)-indole, hydrochloride,

N-(biphenyl-4-sulfonyl)-5-(4-benzylpiperazin-1-yl)-indole, hydrochloride,

N-(napthalene-2-sulfonyl)-5-(4-benzylpiperazin-1-yl)-indole, hydrochloride,

N-(4-propylbenzenesulfonyl)-5-(4-benzylpiperazin-1-yl)-indole, hydrochloride,

N-(3-fluorobenzenesulfonyl)-5-(4-benzylpiperazin-1-yl)-indole, hydrochloride,

N-(4-methoxybenzenesulfonyl)-5-(piperazin-1-yl)-indole, hydrochloride,

N-(2,4-difluorobenzenesulfonyl)-5-(piperazin-1-yl)-indole, hydrochloride,

N-(4-butoxybenzenesulfonyl)-5-(piperazin-1-yl)-indole, hydrochloride,

N-(3,4-dimethoxybenzenesulfonyl)-5-(piperazin-1-yl)-indole, dihydrochloride,

N-(biphenyl-4-sulfonyl)-5-(piperazin-1-yl)-indole, dihydrochloride,

N-(napthalene-2-sulfonyl)-5-(piperazin-1-yl)-indole, dihydrochloride,

N-(4-propylbenzenesulfonyl)-5-(piperazin-1-yl)-indole, dihydrochloride,

N-(3-fluorobenzenesulfonyl)-5-(piperazin-1-yl)-indole, dihydrochloride,

N-benzenesulfonyl-5-(piperazin-1-yl)-indole, dihydrochloride.

32 (New). A compound that is 3-(1-azabicyclo[2.2.2]oct-2-en-3-yl)-1-[(4-fluorophenyl)sulfonyl]-1H-indole.

33 (New). A pharmaceutical composition comprising a compound of claim 28 or 30 and a pharmaceutically acceptable carrier.

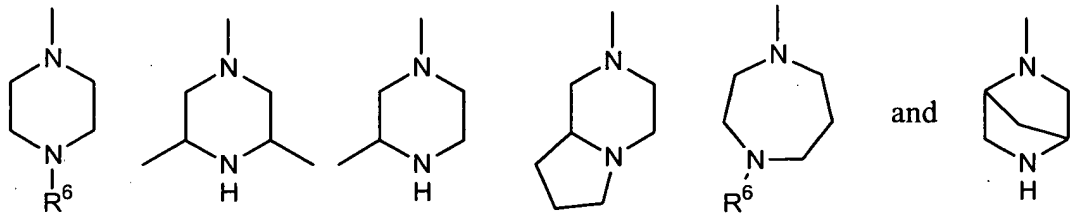
34 (New). A method of treatment of a disease mediated by the serotonin related 5-HT_6 receptor comprising administering to a patient in need thereof a therapeutically effective amount of a compound according to claim 28.

35 (New). The method of claim 34, wherein the disease is a CNS disorder.

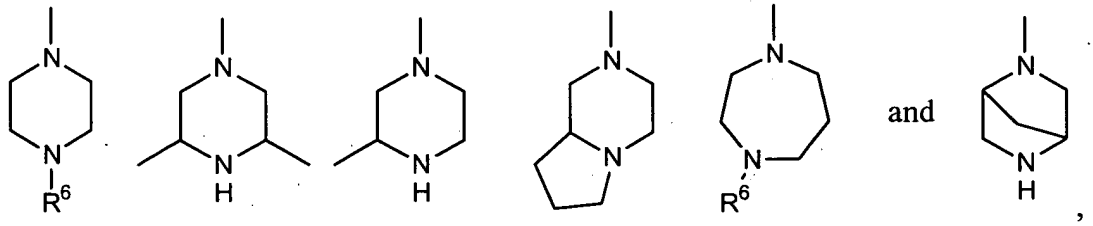
36 (New). A method of treating memory disorder, schizophrenia, Parkinson's disease, depression, or attention deficit hyperactive disorders comprising administering to a patient in need thereof a therapeutically effective amount of a compound according to claim 1 or 28.

37 (New). A method of treating memory disorder, schizophrenia, Parkinson's disease, depression, or attention deficit hyperactive disorders comprising administering to a patient in need thereof a therapeutically effective amount of a compound according to claim 29 or 30.

38 (New). A compound according to claim 28, wherein R^4 is independently H or a heterocyclic ring selected from the group consisting of:

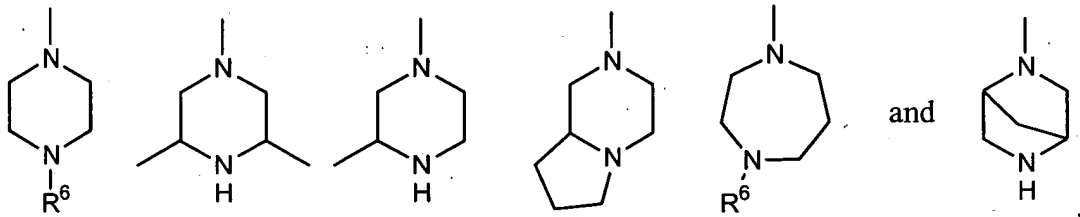


and R^5 is independently a heterocyclic ring selected from the group consisting of:



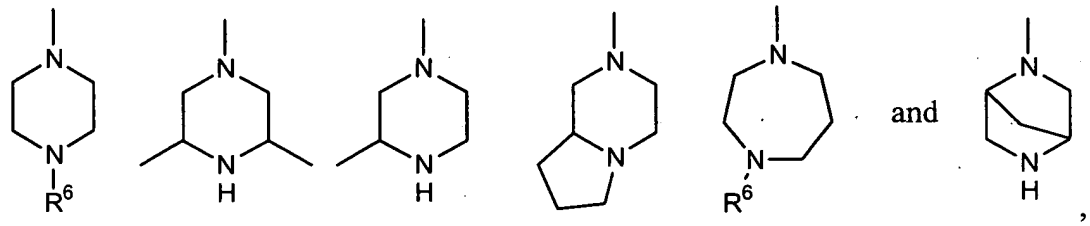
wherein R^6 is H, C_{1-3} alkyl, or benzyl.

39 (New). A compound according to claim 28, wherein Ar is phenyl, optionally substituted with F, Cl, Br, methyl, CF_3, C_{1-4} alkoxyl, OCF_3, CN, NO_2, phenyloxy, phenyl, methylsulfonyl, or $-NR^7R^8$ where each of R^7 and R^8 is independently H or methyl; each of R^2 and R^3 is H; and R^4 is independently H or a heterocyclic ring selected from the group consisting of:



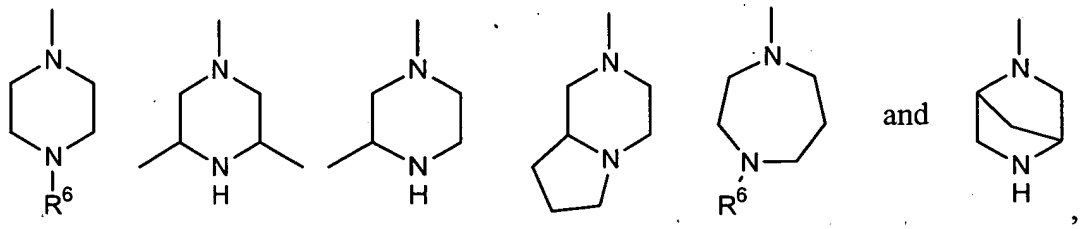
, and

R^5 is independently a heterocyclic ring selected from the group consisting of:

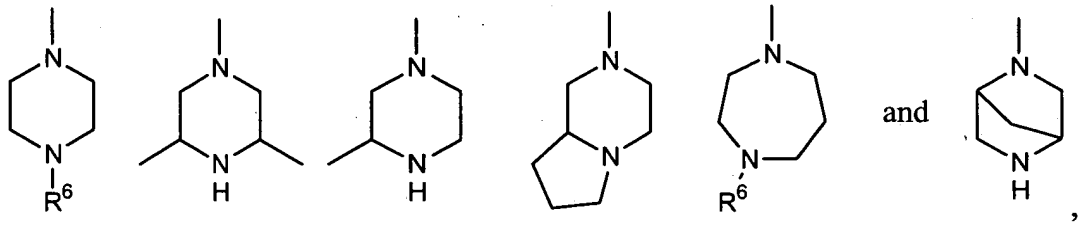


wherein R^6 is H, C_{1-3} alkyl, or benzyl.

40 (New). A compound according to claim 28, wherein Ar is 1-naphthyl or 2-naphthyl, each of which is optionally substituted with F, Cl, Br, methyl, CF_3, C_{1-4} alkoxyl, OCF_3, CN, NO_2, phenyloxy, phenyl, methylsulfonyl, or $-NR^7R^8$, where each of R^7 and R^8 is independently H or methyl; each of R^2 and R^3 is H; and R^4 is independently H or a heterocyclic ring selected from the group consisting of:

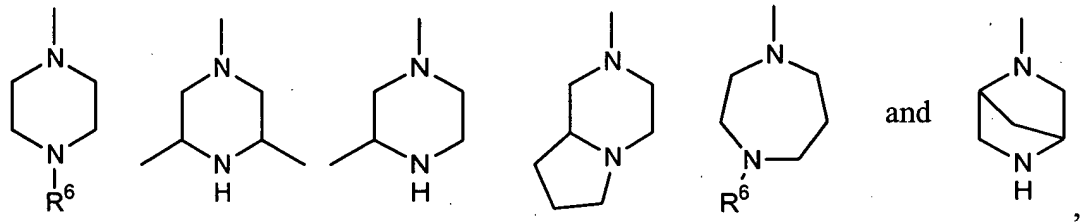


R^5 is independently a heterocyclic ring selected from the group consisting of:

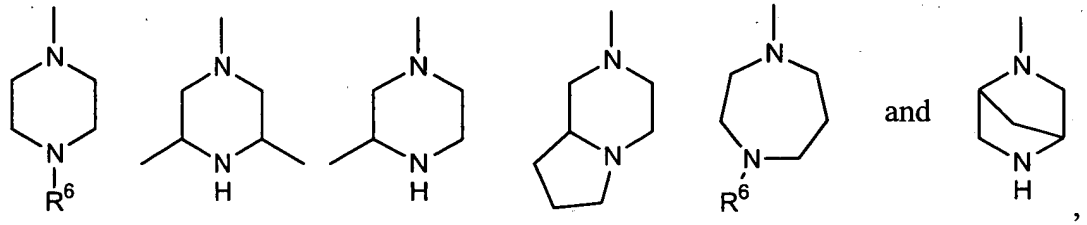


wherein R^6 is H, C_{1-3} alkyl, or benzyl.

41 (New). A compound according to claim 1, wherein Ar is a heterocyclic ring selected from the group consisting of pyridinyl, thienyl, imidazolyl, pyrazolyl, benzothienyl, and benzoxadiazolyl, each being optionally substituted with halogen or C_{1-6} alkyl; each of R^2 and R^3 is H; and R^4 is independently H or a heterocyclic ring selected from the group consisting of:

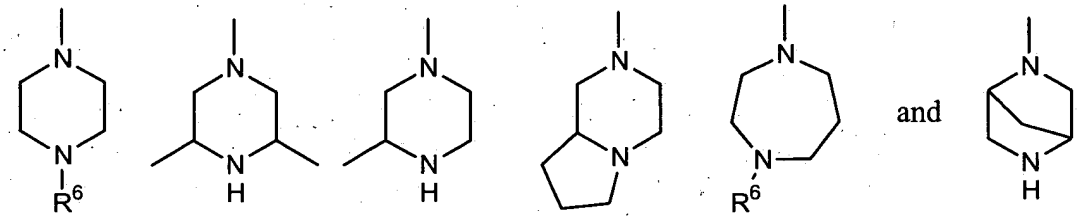


R^5 is independently a heterocyclic ring selected from the group consisting of:



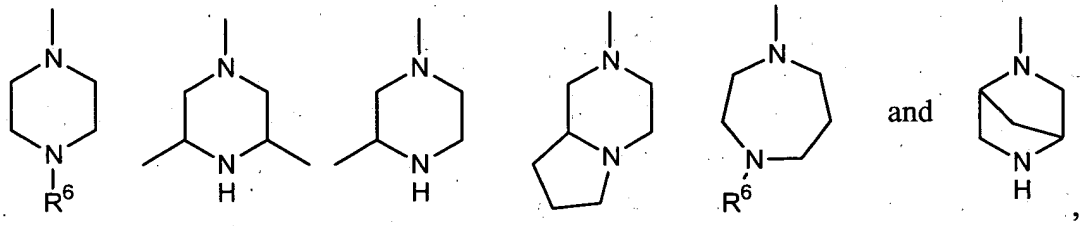
wherein R^6 is H, C_{1-3} alkyl, or benzyl.

42 (New). A compound according to claim 28, wherein Ar is 2-pyridyl, 3-pyridyl, or 4-pyridyl; each of R^2 and R^3 is H; and R^4 is independently H or a heterocyclic ring selected from the group consisting of:



, and

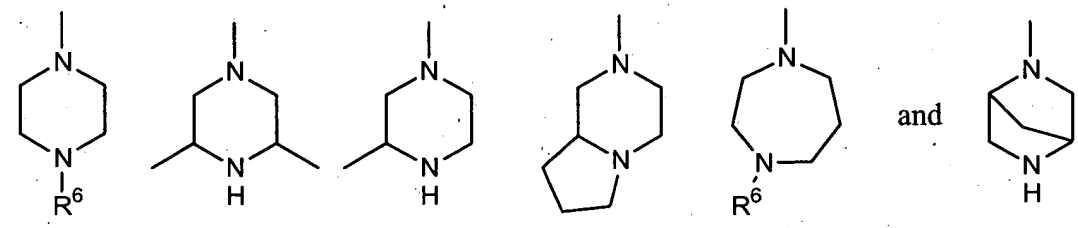
R^5 is independently a heterocyclic ring selected from the group consisting of:



,

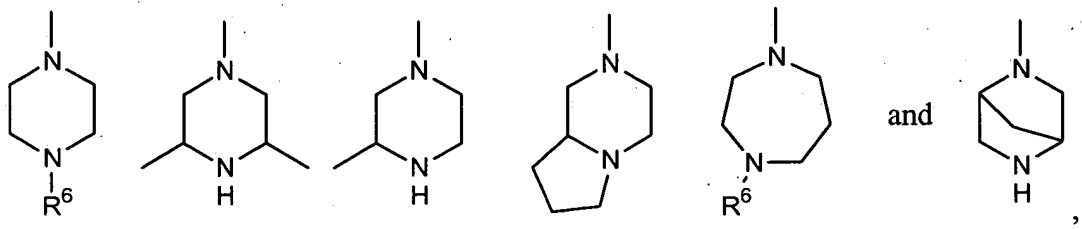
wherein R^6 is H, C_{1-3} alkyl, or benzyl.

43 (New). A compound according to claim 1, wherein Ar is -R^9-phenyl; each of R^2 and R^3 is H; and R^4 is independently H or a heterocyclic ring selected from the group consisting of:



, and

R^5 is independently a heterocyclic ring selected from the group consisting of:



,

wherein R^6 is H, C_{1-3} alkyl, or benzyl; R^9 is C_{1-3} alkyl or C_{2-3} alkenyl, either of which is optionally substituted with phenyl or phenyloxy; each phenyl being optionally substituted with F,

Cl, Br, methyl, CF_3, C_{1-4} alkoxyl, OCF_3, CN, NO_2, phenyloxy, phenyl, methylsulfonyl, or -NR^7R^8; and each of R^7 and R^8 being independently H or C_{1-6} alkyl.

44 (New). A method of treatment of a disease mediated by the serotonin related 5-HT_6 receptor comprising administering to a patient in need thereof a therapeutically effective amount of a compound according to claim 29.

45 (New). A method of treatment of a disease mediated by the serotonin related 5-HT_6 receptor comprising administering to a patient in need thereof a therapeutically effective amount of a compound according to claim 31.

46 (New). A pharmaceutical composition comprising a compound of claim 29 and a pharmaceutically acceptable carrier.

47 (New). The compound according to claim 28, wherein

Ar is

(1) phenyl that is unsubstituted or optionally mono- or poly-substituted with halogen, C_{1-6} alkyl, CF_3, hydroxyl, C_{1-6} alkoxyl, OCF_3, CN, NO_2, phenyloxyl, phenyl, alkylsulfonyl, C_{1-6} alkenyl, -NH_2, -NHR^7, -NR^7R^8, C_{1-6} alkylcarboxyl, formyl, -NH-CO-C_{1-6} alkyl, -CO-NR^7R^8, or SR^7 wherein each of R^7 and R^8 is independently H or C_{1-6} alkyl;

(2) 1-naphthyl or 2-naphthyl that is unsubstituted or optionally mono- or poly-substituted with halogen, C_{1-6} alkyl, CF_3, hydroxyl, C_{1-6} alkoxyl, OCF_3, CN, NO_2, phenyloxyl, phenyl, alkylsulfonyl, C_{1-6} alkenyl, -NH_2, -NHR^7, -NR^7R^8, C_{1-6} alkylcarboxyl, formyl, -NH-CO-C_{1-6} alkyl, -CO-NR^7R^8, or SR^7 wherein each of R^7 and R^8 is independently H or C_{1-6} alkyl;

(3) cynnamoyl;

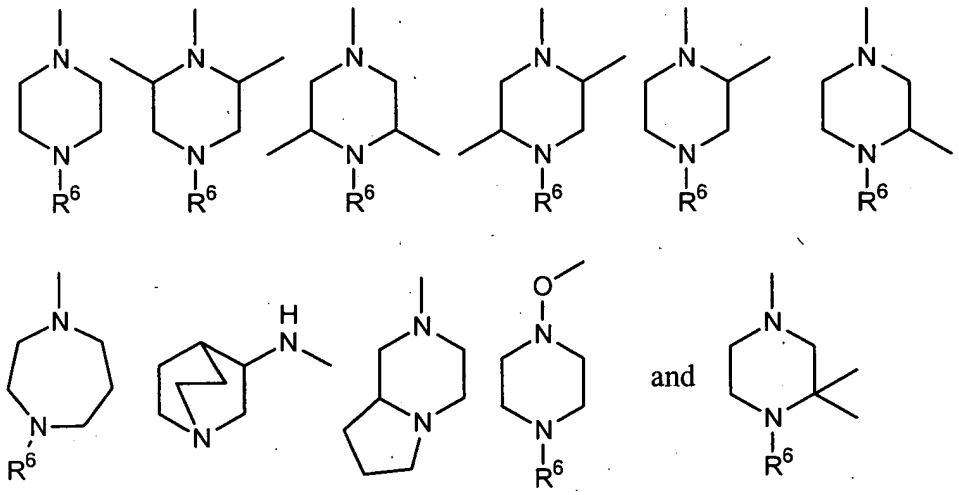
(4) benzyl;

(5) 1,1-diphenylethyl;

(6) a monocyclic or bicyclic heterocyclic ring selected from the group consisting of furyl, pyrrolyl, triazolyl, diazolyl, oxazolyl, thiazolyl, oxadiazolyl, isothiazolyl, isoxazolyl, thiadiazolyl, pyrimidyl, pyrazinyl, thienyl, imidazolyl, pyrazolyl, indolyl, quinolinyl,

isoquinolinyl, benzofuryl, benzothienyl, and benzoxadiazolyl, said heterocyclic ring being optionally mono- or di-substituted substituted with halogen or C_{1-6} alkyl;

R^4 is H or is selected from the group consisting of:

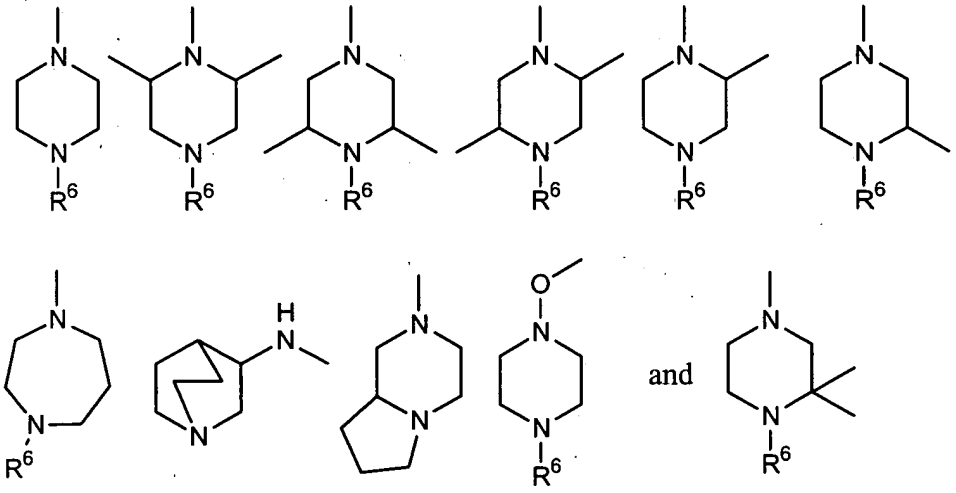


and

;

wherein R^6 is H, C_{1-6} alkyl, or benzyl; and

R^5 is hydroxy, C_{1-3} alkoxy, F, NO_2, CF_3, OCF_3 or is selected from the group consisting of:



and

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